

Designed for SOPEC Member Communities

Is solar energy right for my home or business?

Good question! As the solar economy grows across the world, communities are embracing the opportunity to support clean, green power.

In this ***Step-By-Step Solar Guide***, we make sure you are asking the right questions about solar energy. There are many factors to consider when deciding to go solar, so we've assembled this easy guide to streamline the process.

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Step 1: Conserve Energy First

Before asking if solar is a good investment, you should see if there are cheaper ways to **reduce your overall electricity consumption first**. If your home or business is not energy efficient, you will be wasting precious solar power through drafty doors, windows, and walls. Get a building energy audit to determine how you can reduce your electricity consumption before you pursue a solar installation. By reducing your overall electricity demand on the grid, you won't need as big of a solar system, potentially saving you thousands!

Step 2: Know the Rules

Does your community have any permitting, zoning, or inspection rules for solar PV (electric) system installations? Solar PV systems must comply with Ohio law and the regulations set by the electric utility that serves you: AEP Ohio, AES Ohio, or Buckeye Rural Electric Cooperative (electric co-op utility in Athens County, Ohio). For additional solar information from each electric utility, please see:

AEP Ohio

[AEP Ohio's Solar Energy Webpage](#)
[Interconnecting Your Solar System](#)

AEP Ohio's Distributed Generation Coordinator:

E-mail: dgcoordinator-ohio@aep.com | Phone: 614-883-6775

AES Ohio

[AES Ohio's Renewable Energy Webpage](#)
[Interconnecting Your Solar System](#)

AES Ohio | [800-433-8500](tel:800-433-8500)

Buckeye Rural Electric Cooperative (REC)

[Buckeye REC's Solar 101 Webpage](#)
[10 Steps to Take Before Installing Solar](#)
[Solar - Step By Step](#)
[Solar FAQ's](#)
[Questions to Ask a Solar Contractor](#)

Have additional questions regarding solar? **[Contact Buckeye REC!](#)**

Step 3: Figure Out the Where and How

Most solar PV systems are installed on the roof of a home or business. If the roof is not a suitable option – either because of shade or structural weakness to hold the weight of the solar array – ground-mounted systems can be installed but they are often more costly.

A solar installation provider can help you figure out the where and how. A solar PV system is a significant investment. You may want to hire an accountant to help you take advantage of the variety of federal tax-based incentives that come with a solar investment, especially if you're seeking solar power for your business.

With solar, you can purchase a system outright, with cash or through a loan, or you can lease a solar PV system as part of a power purchase agreement. Each path comes with their own pros and cons.

Step 4: Shop Around for a Solar Installer

Yes – get a quote from **multiple** solar installers, if possible. Quotes should contain a roof assessment, if applicable, with information about the type of panels, racks, and inverters that will be used to build the full solar PV system. **[Do some research.](#)**

[You have rights](#) as a solar customer. Ask installers for a full cost breakdown, ensuring that you see the full system cost, even without the federal investment tax credit of 30%. Also, ask installers if they offer **[flexible financing options](#)** including a breakdown of the details among various options, such as securing financing through a loan or line of credit, a power purchase agreement, or an outright cash purchase.

Select an installer that will manage all necessary requirements with government regulators and will lead communication with the utility for grid interconnection.

Check to see your solar installer of choice is a **licensed contractor** with a credentialed electrician on staff. High-quality solar installers carry North American Board of Certified Energy Practitioners (NABCEP) and/or Electronics Technicians Association (ETA) certification.

The following solar installation companies are located near SOPEC communities:

Southeast Ohio Communities

- [Third Sun Kokosing Solar](#)
- [Appalachian Renewable Power – ARP Solar](#)
- [Athens Electric](#)

Southwest Ohio Communities

- [EnergyWize LLC](#)
- [Solar Power & Light](#)
- [Star City Solar LLC](#)
- [ASIDACO](#)
- [Energy Optimizers, USA, LLC](#)
- [Ohio Roof Masters \(Gigamon Solar\)](#)
- [OGW Energy Resources](#)

See this list of [Ohio Solar Installers](#) for more Ohio-based installers.

Step 5: Installation and Interconnection

You've selected your favorite solar installer, you've lined up financing, a date on when your solar system will be installed is booked, so now you're ready to turn on that solar!

Remember, before you finalize everything, make sure you understand the warranty and maintenance needs of your solar system, the potential liability and insurance needs for your solar investment, and the taxes and tax credits associated with your solar project.

If you're confident to move forward, your installer will ensure proper safety measures have been met and the electric utility has approved the **solar-to-grid connection**. Once you're connected to the grid, the panels will start generating electricity from the sunlight!

Questions? Get Help!

Rural Action, a non-profit organization with a mission to help the Appalachia Ohio region thrive, provides hands-on support for residents and small businesses interested in solar energy and electric vehicles. If you need assistance with your solar project, contact Rural Action's [Sustainable Energy Solutions](#) team.

Additionally, SOPEC – Sustainable Ohio Public Energy Council – manages an opt-out electric aggregation program for its 20 participating communities. This program allows the local government to purchase electricity together for its residents and small businesses.

The SOPEC Electric Aggregation Program is available to eligible accounts located in a SOPEC member community and served by an investor-owned electric utility, either AEP Ohio or AES Ohio. The electric aggregation program rates for SOPEC communities are fixed until June 2023 and are estimated to be:

- 20% cheaper than the AEP Ohio Standard Service Offer (SSO)
- 30% cheaper than the AES Ohio Standard Service Offer (SSO)

These savings are expected over the next supply year (started June 2022), month-to-month, until June 2023 when new SOPEC and SSO rates will be established.

SOPEC and AEP Energy (the supplier of the SOPEC Electric Aggregation Program) offer one of the most valuable solar net-metering agreements for AEP Ohio and AES Ohio customers that have a solar system and are enrolled in the SOPEC Electric Aggregation Program.

The SOPEC solar net-metering agreement serves as a competitive alternative to the investor-owned utilities' net-metering offer for their SSO customers (those that aren't enrolled in a governmental aggregation program or in a separate supply contract with a Certified Retail Electric Service (CRES) provider). SOPEC's net-metering program provides compensation for excess power production at the program rate as a bill credit.